

How the employees' perceptions of corporate social responsibility make them happier and psychologically strongerⁱ

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Abstract: Corporate social responsibility (CSR) has been studied primarily at the macro level, with few studies taking into account the individual level. Furthermore, there are calls for more investigation on the antecedents of employees' psychological capital (PsyCap). This study bolsters both areas. The paper shows how the employees' perceptions of CSR predict their PsyCap both directly and through the mediating roles of positive affect and the sense of meaningful work. Two hundred and seventy-nine employees participate. The study uses structural equation modeling to test the hypothesized model. The findings suggest that both positive affect and the sense of meaningful work partially mediate the relationship between the perceptions of CSR and PsyCap. The study helps to understand the underlying mechanisms linking CSR with outcomes at the individual level. Studying CSR at the individual level is valuable for both academic and practical reasons.

Keywords: perceptions of corporate social responsibility; positive affect; psychological capital; sense of meaningful work.

Introduction

Psychological capital (PsyCap) is “an individual’s positive psychological state of development characterized” by four strengths: self-efficacy, optimism, hope, and resilience [1, p.3]. PsyCap relates positively with important employee attitudes and multiple measures of performance, and negatively with undesirable attitudes and behaviors [2, 3]. Few researchers consider what is “to the left of PsyCap (i.e., the antecedents in a theoretical model)” [4, p.148]. This paper focuses on how the perceptions of corporate social responsibility (CSR) predict PsyCap. Studies about CSR focus mainly on the institutional and organizational levels [5], with very few studies focusing on the individual level [6]. Because of this, the study considers it of interest to associate employees' perceptions of CSR and PsyCap, a relationship that is absent from literature. Studies about the mechanisms (i.e., mediators) explaining the relationship between perceived CSR and employees' outcomes are also scarce [5, 7]. This paper focuses on two possible mediators: (1) positive affect (“a pleasant feeling state or good mood” [8, p.286]), and (2) the sense of meaningful work (“finding a purpose in work that is greater than the extrinsic outcomes of the work” [9, p.195] p. 195). These variables represent, respectively, hedonic and eudemonic components of psychological well-being at work [10, 11].

Because of reasons explained below, the study hypothesizes (Figure 1) that positive perceptions of CSR lead employees to experience a stronger sense of meaningful work and more positive affect, these positive feelings “building” their PsyCap. Studying these mediators helps to shed light on the “underlying engines” [12, p.108] through which the perceptions of CSR “translate” into PsyCap. By integrating the four positive constructs in the same model, the study contributes to the Positive Organizational Scholarship (POS) movement via the incorporation of social responsibility and an ethical stance [13].

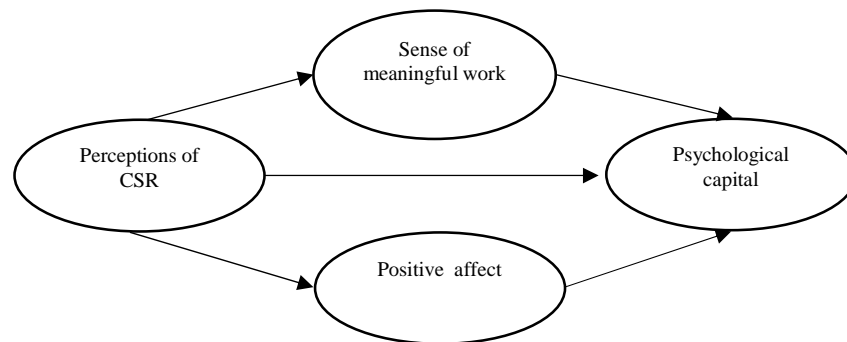


Figure 1: Hypothesized model.

Theory and Hypotheses

Psychological Capital

PsyCap is a higher-order (core) construct comprising four dimensions [1, p.3]: (a) self-efficacy (“having confidence to take on challenging tasks and put in the necessary effort to succeed at challenging tasks”; (2) optimism (“making a positive attribution about succeeding now and in the future); (3) hope (“persevering toward goals and, when necessary, redirecting paths to goals in order to succeed); (4) resilience (“when beset by problems and adversity, sustaining and bouncing back and even beyond to attain success”. Considering PsyCap as a higher-order (core) construct has both conceptual and empirical support [1, 14-17]. The underlying mechanism common to the four components is a positive agentic motivation toward employees’ performance and success [14, 18]. PsyCap may be considered both at the individual and team/organizational levels [19], and the focus adopted here is the individual one. We aim to study how the individuals’ perceptions of CSR predict their (individual) PsyCap. Before discussing how employees’ perceptions of CSR influence this positive agentic motivation, the paper clarifies the CSR perspective adopted here.

Corporate Social Responsibility

Considering different CSR conceptualizations [5, 20], this paper adopts that of Maignan, Ferrell and Hult [21, p.457] one: CSR is “the extent to which businesses meet the economic, legal, ethical, and discretionary responsibilities placed on them by their various stakeholders”. This conceptualization is inspired by one of the most popular frameworks of CSR, proposed by Carroll [22, 23]. Economic citizenship includes the duty to be productive, to bring utilitarian benefits to employees and other stakeholders, to maintain corporate economic wealth, and to meet consumption needs. Legal citizenship requires pursuing the firm’s economic mission within the framework of the law. Ethical citizenship requires that companies abide by society’s moral rules. Discretionary citizenship means meeting society’s desire to see companies actively involved in societal betterment beyond economic, legal, and ethical activities.

This four-dimensional construct, operationalized and validated by Maignan et al. [21], has been used in subsequent empirical studies [24-27]. Rego, Leal and Cunha [28] suggest that the model does not fairly represent all pertinent dimensions, and empirically demonstrate that employees distinguish seven dimensions: (1) economic responsibilities toward customers and (2) owners; (3) legal responsibilities; (4) ethical responsibilities; and (5) discretionary responsibilities toward employees, (6) the community, and (7) the natural environment. Although these dimensions represent different components of the same construct, synergies exist among them, and CSR may be considered a core (higher-order) construct comprising several CSR dimensions. A possible consequence of these synergies is that employees who perceive their organizations as being strong/weak in one CSR component also tend to form positive/negative perceptions about other components. There are also reasons to believe that employees are sensitive to how their organizations act synergistically/consistently upon the several CSR dimensions [28, 29].

CSR Predicting PsyCap

Employees are not just observers of CSR practices. They are also directly (e.g., through wage, and occupational health/safety practices) and indirectly (e.g., through organizational policies affecting the local community to which employees belong) influenced by such practices. Thus, how employees perceive CSR influences their attitudes and behaviors and, as this paper suggests, their PsyCap.

Self-efficacy

The most effective way to promote employees' self-efficacy is by allowing them to experience success [i.e., mastery experiences; 30]. CSR practices may contribute to such experiences. Through receiving organizational support to develop their skills and competencies, employees develop confidence in their ability to be successful in performing their tasks [1, 15, 31]. Self-efficacy also develops as a result of vicarious learning [31, 32]. Considering that within an organization that is economically responsible and successful, success experiences are more available, the internal observers of such successful experiences develop self-efficacy.

Resilience

Through (a) having organizational support to develop their skills, competencies, and careers, (b) receiving good salaries, (c) working for an economically successful organization, and (d) observing that the organization behaves legally and ethically and is thus less susceptible to legal and reputational losses, employees grow better equipped to face problems and difficulties and to deal with setbacks, at both the personal and organizational levels [33, 34]. Employees' resilience also increases when the organization adopts socially responsible actions that promote psychological and physical health (e.g., work-family balance policies; wellness programs; employee assistance programs). These actions reduce the risks and stressors that make undesired outcomes more likely [31].

Hope. Socially responsible organizations are more likely to involve employees in decision-making (e.g., as a way to develop their skills and career), and to provide them with active training opportunities, both being important approaches to develop the two components of employees' hope: agency (i.e., willpower) and pathways (i.e., waypower) [1, 31]. When employees perceive that they work for a socially responsible organization that respects the law, is ethical, and is economically well-managed, they develop better senses of agency and control over their (professional and family/personal) lives, both being necessary to develop hope.

Optimism

When working for a socially responsible organization, employees are more likely to develop three perspectives that make them more optimistic [1, 31, 33]: (1) they develop leniency for the past because they consider that current socially responsible actions and decisions made past failures and setbacks less likely; (2) they develop appreciation for the present because they are more likely to experience thankfulness and contentment for working for an organization that, in addition to being economically well-managed, also respects the law, behaves ethically, respects and supports employees, and acts responsibly toward the environment and the community; (3) they develop opportunity-seeking for the future because in organizations where personal development is promoted and economic responsibilities are pursued in ethical and legal ways, the future is seen in a positive/optimistic light and to be full of opportunities.

Considering the above arguments, and taking into account the synergies between CSR dimensions, as well as between the components of PsyCap, the study hypothesizes:

Hypothesis 1: Employees with better perceptions of CSR develop greater PsyCap.

CSR Predicting the Sense of Meaningful Work

Meaningful work is "work experienced as particularly significant and holding more positive meaning for individuals" [12, p. 95]. Organizations perceived as socially responsible may be sources of meaning. Rosso et al. [12, p.101] argue that "when organizations provide their employees with opportunities to contribute something of value to fellow members of the organizational community, employees gain an enhanced sense of purpose, agency, and impact, which are experienced as meaningful". Organizations perceived as acting in legal and ethical ways, protecting the environment, and caring for community welfare, enrich employees' work with moral purpose and commitment, thus nurturing a sense of mission [35]. Kanter [36] argues that "great companies" (i.e., those that "combine financial and social logic to build enduring success"; p. 66) provide purpose and meaning. Hence:

Hypothesis 2: Employees with better perceptions of CSR develop a stronger sense of meaningful work.

Sense of Meaningful Work Predicting PsyCap

Employees are more engaged in work that they view as meaningful [37], and engagement may increase self-efficacy [38]: as employees become more engaged in their work, they acquire confidence in their abilities to reach goals and to succeed. Self-efficacy also encourages engagement, thus giving rise to positive spirals of self-efficacy development. The sense of meaningful work promotes other components of PsyCap because employees experiencing such a sense develop stronger intrinsic motivation and passion for work [39]. Employees who are intrinsically motivated and passionate about their work develop more energy and persist in pursuing (meaningful)

goals, develop greater willpower and waypower for reaching them, and are more optimistic and resilient when dealing with the hassles and drawbacks of organizational life [35, 40]. Considering synergies among the components of PsyCap, the effects of the sense of meaningful work upon one component of PsyCap reverberate to other components. Hence:

Hypothesis 3: Employees with a stronger sense of meaningful work develop greater PsyCap.

The Sense of Meaningful Work as Mediator

Taking into account that the perceptions of CSR predict the sense of meaningful work (H2), and that the sense of meaningful work predicts PsyCap (H3), employees who perceive their organizations as more socially responsible also develop a greater sense of meaningful work, which in turn helps them to develop stronger PsyCap. Considering that the sense of meaningful work is only one mediating mechanism among others, the study hypothesizes:

Hypothesis 4: The sense of meaningful work partially mediates the relationship between the perceptions of CSR and PsyCap.

Perceptions of CSR Predicting Positive Affect

Another mediator is positive affect. Robertson and Cooper [10] argue that CSR influences psychological well-being, with positive affect being a component of psychological well-being. Researchers [e.g., 41, 42] suggest that exposure to virtuous and socially responsible practices produces positive emotions such as love, empathy, zest, and enthusiasm. The feeling that one works in a socially responsible organization may render the job more intrinsically rewarding and, thus, lead to greater positive affect [43]. Observing socially responsible practices may also develop positive affect because employees feel psychologically and emotionally safer [44] and consider work situations as controllable [45]. Hence:

Hypothesis 5: Employees with better perceptions of CSR experience greater positive affect.

Positive Affect Predicting PsyCap

For supporting the mediation argument, the paper next explains how/why positive affect influences PsyCap. The broaden-and-build theory [46] suggests that positive affect broadens the employees' momentary thought-action repertoires and builds their enduring psychological resources. Employees who experience positive affect interpret failure more as a temporary setback caused by situational, as opposed to individually-based circumstances [47]. Thus, they develop greater optimism and persistently seek to complete their duties and achieve goals even when they encounter obstacles and setbacks. With less fear of failure, they continue to look for different pathways to reach goals and they are more inclined to face problems and opportunities with creative ideas [48]. Employees experiencing positive affect are also more able to bounce back after experiencing adversity [49]. Considering synergies among the components of PsyCap, the influence of positive affect upon a component reverberates to other components. Thus:

Hypothesis 6: Employees experiencing greater positive affect develop greater PsyCap.

Positive Affect as Mediator

Considering that perceptions of CSR predict positive affect (H5), and that positive affect predicts PsyCap (H6), the paper hypothesizes that employees with better perceptions of CSR experience greater positive affect, which, in turn, helps them to develop greater PsyCap. Taking into account that positive affect is just one mediating mechanism among others, the study derives the next hypothesis:

Hypothesis 7: Positive affect partially mediates the relationship between the perceptions of CSR and PsyCap.

Method

Sample and Procedures

Two hundred and seventy-nine employees (45.2% female), working in 21 organizations operating in Portugal, participate in the study. From these, 20.1% perform some kind of supervisory role, and 51.6% work in the services sector; 7.9% have 9 schooling years, 39.4% between 10 and 12 years, and 52.7% have an undergraduate degree or higher. Mean age is 37.3 years (SD: 7.94), and mean organizational tenure is 11.6 years (SD: 8.94). The study collects all variables from the same source (employees) and simultaneously. Collecting data about predictor and criterion variables from different sources is not feasible because all variables capture perceptions, judgments, and

feelings [50]. A temporal separation between the measures is not possible because the complexity introduced by such a procedure is not allowed by several organizations. Thus, to reduce the risks of common method variance, the study uses several measures. To guarantee anonymity, participants deliver their responses under sealed cover directly to the researchers. The researchers ask them to respond as frankly as possible. The study also employs different scale endpoints, formats, and ranges for the predictor, mediators, and criterion measures, and adopts several “statistical remedies” [50; see below].

Measures

The study measures the perceptions of CSR with forty 7-point scales [28]. Employees report the degree to which each statement applies to the organization (1: “does not apply to my organization at all”; ...; 7: “... applies completely”). Confirmatory factor analysis (AMOS 21.0; maximum likelihood estimation method) shows that the fit indices of the 7-factors model are acceptable (e.g., RMSEA: 0.08). For measuring PsyCap, the study uses the Portuguese version [17] of the Psychological Capital Questionnaire [PCQ-24; 1]. The measure comprises twenty four 6-point items (1: “strongly disagree”; ...; 6: “strongly agree”). The fit indices of the 4-factors model are acceptable (e.g., RMSEA: 0.08). Four 5-point scales [51] measure the sense of meaningful work. Employees report the degree to which they agree with the sentences (1: “strongly disagree”; ...; 5: “strongly agree”). For measuring positive affect, employees indicate how often they had felt happy, enthusiastic, and excited during the previous month, through a 7-point scale, ranging from never (1) to always (7). These items were adapted by Turban, Stevens and Lee [52] from the Job Affect Scale [53]. Because positive affect and the sense of meaningful work are two components of psychological well-being at work [10], the study compares the two-factor model with the single-factor model. While the two-factor model fits the data well (e.g., GFI: 0.94; CFI and IFI: 0.96), the single-factor model does not (e.g., GFI: 0.77; CFI and IFI: 0.73), and the models are significantly different ($\Delta\chi^2(1) = 229.70$; $p < 0.001$).

Measurement Analysis

Before testing the hypothesized model, confirmatory factor analyses (AMOS 21.0; maximum likelihood estimation method), with all indicators loading the respective constructs (CSR: seven latent constructs; PsyCap: four; meaningful work: one; positive affect: one), test the measurement model. Because the covariance matrix is not positive definite, the solution emerges as not admissible. A possible explanation is the relative small sample size (i.e., taking into account the number of variables in the model). Thus, we use a sample of three items per construct instead of the original ones. For each construct, we select the three items that best represent the construct (that is, the ones with higher standardized loadings). After these procedures, a reasonably well-fitted model emerges (Table 1).

Table 1: Measurement model (standardized loadings and reliabilities)

	λ_s	CR	AVE	α
Economic responsibilities toward customers		0.84	0.63	0.82
We continually improve the quality of our products.	0.68			
Customer satisfaction is a central aim of our company.	0.87			
Our company does everything it can do to satisfy customers.	0.82			
Economic responsibilities toward owners		0.82	0.60	0.81
We strive to lower our operating costs.	0.66			
Our company aims to improve productivity continuously.	0.89			
Our company aims to be more and more profitable.	0.76			
Legal responsibilities		0.79	0.56	0.78
17Our contractual obligations are always honored.	0.78			
24Our company acts legally in all matters.	0.67			
31Our company seeks to comply with all laws regulating hiring and employee benefits.	0.78			
Ethical responsibilities		0.84	0.64	0.84
Members of our organization follow professional standards.	0.75			
Our company behaves fairly with every organization and all people with whom it relates.	0.86			
Our company always does what is ethically correct.	0.79			
Discretionary responsibilities toward employees		0.80	0.58	0.80
The salaries offered by our company are higher than industry averages.	0.62			

Our company policies encourage the employees to develop their skills and careers.	0.76			
The managerial decisions related with the employees are usually fair.	0.88			
Discretionary responsibilities toward community		0.82	0.60	0.81
Our business gives adequate contributions to charities.	0.75			
Our business supports local sports and cultural activities.	0.70			
Our company takes measures to develop the local community.	0.86			
Discretionary responsibilities toward environment		0.88	0.71	0.87
A program is in place to reduce the amount of energy and materials wasted in our business.	0.83			
Our company takes care of the natural environment beyond what is required by law.	0.80			
Our company seeks to reduce the pollution emissions and the production of residuals.	0.89			
Self-efficacy		0.84	0.64	0.84
I feel confident analyzing a long-term problem to find a solution.	0.73			
I feel confident in representing my work area in meetings with management.	0.90			
I feel confident contributing to discussions about the company's strategy.	0.76			
Hope		0.76	0.51	0.76
At the present time, I am energetically pursuing my work goals.	0.71			
Right now I see myself as being pretty successful at work.	0.73			
At this time, I am meeting the work goals that I have set for myself.	0.70			
Resilience		0.78	0.54	0.76
I usually manage difficulties one way or another at work.	0.72			
I usually take stressful things at work in stride.	0.76			
I feel I can handle many things at a time at this job.	0.73			
Optimism		0.81	0.59	0.80
When things are uncertain for me at work, I usually expect the best.	0.63			
I always look on the bright side of things regarding my job.	0.81			
I'm optimistic about what will happen to me in the future as it pertains to work.	0.84			
Sense of meaningful work		0.90	0.76	0.90
The work I do is very important to me.	0.89			
My job activities are personally meaningful to me.	0.80			
The work I do is meaningful to me.	0.92			
Positive affect		0.82	0.60	0.80
Happy	0.68			
Enthusiastic	0.87			
Excited	0.76			
Fit indices				
Chi-square	1013.57			
Degrees of freedom (df)	624			
Chi-square/df ratio	1.62			
Root Mean Square Error of Approximation (RMSEA)	0.047			
Tucker-Lewis Index (TLI)	0.93			
Comparative Fit Index (CFI)	0.94			

Notes: λ_s – standardized loadings; CR – Construct reliability; AVE – Average variance extracted; α – Cronbach's alpha.

The final model shows an adequate fit (e.g., $\chi^2(624) = 1013.57$; RMSEA: 0.05; CFI: 0.94; TLI: 0.94). The factor loadings are large (≥ 0.60) and the average variance extracted for each factor equals or exceeds 0.50. These findings support convergent validity. Construct reliability of each scale equals or exceeds the 0.80 threshold, except for hope (0.76) and resilience (0.78). Cronbach Alphas are greater than 0.70.

CSR and PsyCap as Second-Order Constructs

A second-order factor model, in which the seven CSR factors load the same core-factor, fits the data satisfactorily (e.g., RMSEA: 0.08; CFI: 0.92), with fit indices similar to those of the first-order factor model. A usefulness analysis also tests if considering the perceptions of CSR as a core construct is appropriate. A usefulness analysis involves a series of regressions in which one variable (e.g., CSR as a core construct) is compared to other variables (e.g., each one of the seven CSR dimensions) to see which variable is the most “useful” in predicting criterion variables. The findings indicate the following: (a) the individual CSR components do not add any significant variance, or add a very small variance, in predicting the three criterion variables; (b) except for CSR toward employees, the predictive value of the individual component is lower than the predictive value of the overall CSR. In almost all cases, overall CSR increases the R² value above its respective individual components. Considering (a) the parsimony of the second-order factor model, (b) the results of the usefulness analysis, and (c) earlier empirical evidence suggesting that it is appropriate to consider perceptions of CSR as a core construct [29], we consider CSR as a core construct (Cronbach Alpha: 0.89).

The fit indices of the second-order factor model for PsyCap are also reasonably satisfactory and similar to those of the first-order model (e.g., RMSEA: 0.06; CFI: 0.96). Considering the parsimony of the second-order factor model and literature [17, 54, 55] suggesting that it is appropriate to consider PsyCap as a core construct, this paper selects the second-order factor (Cronbach Alpha: 0.80).

Testing Risks of Common Method Variance

Because all measures are collected using the same survey instrument, the study explores the extent to which common method variance (CMV) is a concern. First, the study performs the Harman’s single-factor test. If common method bias is a threat, a factor analysis of all the variables in the model will give rise to a single factor or to a general factor accounting for the majority of the covariance among the measures. Unrotated factor analysis using the eigenvalue-greater-than-one criterion reveals eight factors (explaining 67.9% of variance), with the first explaining 32.8% of the variance. Second, the study next compares two models through confirmatory factor analysis. The first model includes thirteen factors (Table 1). The second is a single-factor one (i.e., the 39 items/indicators loading on the same factor). The single-factor model does not fit the data well (e.g., RMSEA: 0.12; CFI: 0.53), both models being significantly different ($\Delta\chi^2(78) = 2708.66$; $p < 0.001$). These findings suggest that common source bias is not a serious risk for the study validity.

Control Variables

The study includes gender, age, tenure, and schooling as control because studies suggest that they relate to variables such as positive affect [e.g., 56, 57, 58], and/or PsyCap [e.g., 59, 60]. Being supervisor versus not being supervisor is included because tasks of supervisors versus those of non-supervisors tend to differ significantly regarding empowerment, autonomy, and status. These differences may influence the sense of meaningful work. The study also includes the perceived inconsistency about the CSR dimensions for control [29].

Findings

Means, Standard Deviations, and Correlations

Table 2 shows means, standard deviations, and correlations. Gender correlates positively with the inconsistency about the CSR dimensions, and negatively with schooling, sense of meaningful work, and PsyCap. Age correlates positively with tenure and supervising, and negatively with schooling. Tenure correlates positively with the inconsistency about the CSR dimensions, and negatively with schooling. Schooling correlates positively with positive affect. Supervisors have better perceptions of CSR and greater positive affect, sense of meaningful work, and PsyCap. The perceived inconsistency about the CSR dimensions correlates negatively with perceptions of CSR, positive affect, sense of meaningful work, and PsyCap. Perceptions of CSR correlate positively with positive affect, sense of meaningful work, and PsyCap. Positive affect correlates positively with sense of meaningful work and PsyCap. Sense of meaningful work correlates positively with PsyCap.

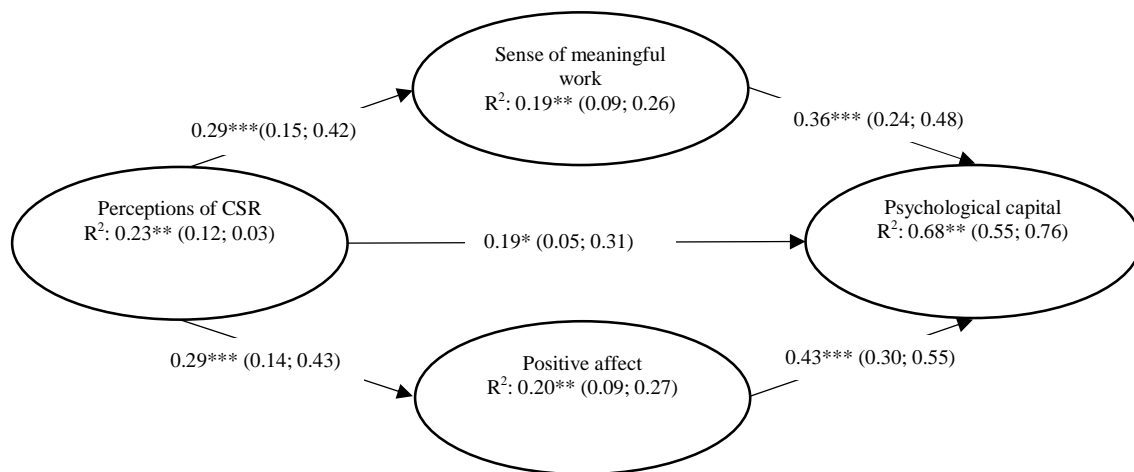
Table 2: Means, standard-deviations, and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Gender (a)	0.55	0.50	-								
2. Age	37.25	7.94	0.04	-							
3. Org. tenure (b)	11.58	8.94	0.00	0.80***	-						
4. Schooling (b)	14.49	3.06	-0.12*	-0.26***	-0.35***	-					
5. Supervising (c)	0.20	0.40	-0.05	0.16**	0.09	0.08	-				
6. Inconsistency about the CSR dimensions	0.94	0.54	0.17**	0.03	0.12*	-0.09	-0.08	-			
7. CSR-overall	5.20	0.80	-0.09	0.06	-0.02	0.01	0.13*	-0.55***	-		
8. Positive affect	4.86	1.11	-0.09	-0.04	-0.07	0.13*	0.18**	-0.27***	0.32***	-	
9. Sense of meaningful work	4.19	0.72	-0.12*	0.07	0.01	0.00	0.18**	-0.27***	0.36***	0.38***	-
10. PsyCap	4.74	0.60	-0.16**	-0.02	-0.10	0.10	0.30***	-0.35***	0.46***	0.55***	0.52***

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. (a) 0: female; 1: male; (b) years; (c) 0: not supervisor; 1: supervisor.

Structural Equation Modeling

Structural equation modeling (Figure 2) tests the hypothesized model (AMOS 21.0; maximum likelihood estimation method) with the 39 items loading on the respective factor. All the controls are added to the model. Fit indices are only satisfactory (e.g., $\chi^2(897)=2028.21$; $\chi^2/df=2.26$; RMSEA=0.067; CFI=0.85) but all paths between latent variables are significant. Bootstrap method is used to determine the bias-corrected confidence intervals for mediation effects. SEM provides unbiased estimates of mediation and the bias-corrected bootstrap confidence intervals perform best in testing for mediation [61]. Confidence intervals were constructed from 5000 bootstrap samples. MacKinnon et al. [62, 63] recommend using the bootstrap approach over the Sobel's test because the former has higher power while maintaining reasonable control over the Type I error rate.

**Figure 2:** Structural equation modeling for the hypothesized model.

Notes: (a) * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. (b) Values on the paths are standardized regression weights (within brackets: lower bound value; upper bound value of the 95% IC, bias-corrected percentile method). (c) For R^2 , the values within brackets represent the lower and the upper bounds of the 95% IC, bias-corrected percentile method. (d) Paths from control variables not shown. (e) Fit indices: $\chi^2(897)=2028.21$; $\chi^2/df=2.26$; RMSEA=0.07; TLI=0.83; CFI=0.85.

The sense of meaningful work and positive affect partially mediate the relationship between perceptions of CSR and PsyCap, since: (1) the perceptions of CSR predict PsyCap ($\beta = 0.19$, $p < 0.05$); (2) the perceptions of CSR predict both mediators (positive affect, $\beta = 0.29$, $p < 0.001$; sense of meaningful work, $\beta = 0.29$, $p < 0.001$); (3) both mediators

predict PsyCap (positive affect, $\beta = 0.43$, $p < 0.001$; sense of meaningful work, $\beta = 0.36$, $p < 0.001$). The indirect effect of perceptions of CSR on PsyCap is significant ($\beta = 0.23$, $p < 0.001$; Bootstrap 95% IC: 0.13; 0.34). Mediation is partial because the effect of the perceptions of CSR on PsyCap is significant when both mediating variables are included in the model.

An important finding, although not central for the hypothesized model, is that the perceived inconsistency about the CSR dimensions has significant and negative effects on the perceptions of CSR: employees who perceive their organizations as less consistent regarding the CSR experience develop lower perceptions of CSR ($\beta = -0.46$, $p < 0.001$).

Analysis, Discussion, and Conclusions

Main Findings

The findings support all hypotheses. Employees with better perceptions of CSR develop greater PsyCap (H1), stronger sense of meaningful work (H2), and greater positive affect (H5). Employees with stronger sense of meaningful work develop greater PsyCap (H3). Employees experiencing higher positive affect develop greater PsyCap (H6). The relationship between the perceptions of CSR and PsyCap is partially mediated by the sense of meaningful work (H4) and by positive affect (H7). The research calls attention to the importance of studying CSR at the individual level [5, 7, 64], and corroborates Herrbach, Mignonac and Gatignon's [65] observation that HR objectives (e.g., developing the employees' psychological strengths) may be attained by practices that are not at first sight targeted at employees. The study helps to understand that organizations may promote employees' PsyCap by investing in CSR practices and ensuring that employees perceive such practices. The paper improves knowledge about the underlying mechanisms driving the (understudied) relationship between the perceptions of CSR and PsyCap: investing in CSR may have a positive impact on employees' PsyCap because, among other reasons, employees form a stronger sense of meaningful work and experience more positive affect. As Rosso et al. [12, p.120] suggest, although "individuals ultimately must decide for themselves what is or is not meaningful, individuals are also strongly influenced by the social and cultural forces and environments around them".

Note that the stronger is the inconsistency about CSR dimensions, the lower is the mean score of perceptions of CSR. The finding corroborates Rego, Leal et al. [29]. A possible explanation is that the perceived inconsistency makes the organizational image more fluid from the employees' point of view, thus leading employees to view the organization less positively. The findings indicate how synergies can be created among several (perceived) organizational practices [66]. They also help to understand how managers can bring organizational and employees' interests into harmony: (a) on the one hand, PsyCap, positive affect, and the sense of meaningful work are important predictors of individual well-being [1, 10, 12]; (b) on the other hand, PsyCap [2, 67], the sense of meaningful work [12, 35, 37], and positive affect [10, 68] are crucial for employees' and organizational performance.

Limitations and Future Studies

The study is not without limitations. First: although alternative models represent the data more poorly than the hypothesized model, this does not mean that alternative explanations for the relationships between variables are not plausible (see arguments supporting alternative models).

Second, the study collects all variables simultaneously from the same source. Although reassuring about the validity of the study the "statistical remedies" do not exclude possible common method bias. Future studies may collect data for dependent and independent variables at separate moments. Another way to minimize these risks is to use a multiple source method, with some employees reporting their perceptions of CSR and others expressing their sense of meaningful work, positive affect, and PsyCap. However, such a procedure is more appropriate to test the model at the collective level. Asking one employee about how (s)he perceives organizational features and another employee to report the sense of meaningful work, the positive affect, and the PsyCap of the former, does not make sense. Differently, adopting a collective level of analysis by (a) asking some employees to describe CSR, (b) asking other employees to report their own sense of meaningful work, positive affect, and PsyCap, and (c) aggregate individual scores at the collective level, makes sense.

Third, being carried out at a single moment, the study does not capture the dynamics over the course of time, involving changes in perceptions of CSR, and in psychological states. The study also fails to capture the reciprocal relationships and upward and downward spirals [46] that occur over time. Difficulties in making accurate retrospective self-descriptions may also have produced bias with consequences for data accuracy. Longitudinal

designs, research diaries, the experience sample methodology, or the “day reconstruction method” [69] may be particularly appropriate tools for gathering data in future studies.

Fourth, the study measures positive affect with only three items, and the sense of meaningful work with only four items. This procedure may restrict the content coverage of both constructs. Future studies may adopt more extensive and multidimensional measures. Considering that the study treats both positive affect and the sense of meaningful work as state-like variables, future studies may also control for positive-affectivity trait as well as for eudemonic trait [e.g., work as calling; 11]. Fifth, the study includes two mediating variables only. Future studies may consider other mediating variables, such as self-esteem, organizational identification, perceived external organizational image, intrinsic/extrinsic work motivation, and passion for work [39].

Sixth, future studies may include moderators. For example, employees with different personal values may react differently to their perceptions of CSR. Seventh, the present study does not corroborate the seven-factor model of CSR [28], since ethical and legal dimensions do not have discriminant validity. Future studies should continue to explore the issue. Finally, being carried out in a single culture, the study may have produced some idiosyncratic findings. For example, does the feminine and highly in-group collectivistic features of the Portuguese culture [70, 71] make employees more sensitive to CSR than would occur among employees in masculine and low in-group collectivistic cultures? Future studies may use a cross-cultural research method for testing if culture moderates the relationship between perceptions of CSR and mediating variables.

Implications for Management

In spite of the above limitations, the study suggests that organizations may promote their employees' PsyCap (as well as the corresponding positive outcomes, including employees' happiness, as well as employees' and collective performance) if they (a) adopt CSR practices, (b) make sure that employees perceive such practices, and (c) foster employees' positive affect and meaningful work through ways other than CSR practices and policies [e.g., promoting organizational virtuousness; 41, 72, 73, 74]. The study also suggests that organizations should act consistently regarding the several CSR dimensions. Auditing the employees' perceptions of CSR, their sense of meaningful work [37], and their affective experiences, are HRM practices that organizations may consider.

Concluding Remarks

The antecedents of PsyCap are under-researched [2], and this study enriches the literature on this topic. To our knowledge, this study is the first to integrate, in one single model, perceptions of CSR, two components of psychological well-being, and PsyCap. To a certain degree, the paper may help organizations to pursue the ecocentric paradigm. As Shrivastava [75] points out, “Organizations in the ecocentric paradigm are appropriately scaled, provide meaningful work, have decentralized participative decision making, have low earning differentials among employees, and have nonhierarchical structures. They establish harmonious relationships between their natural and social environments. They seek to systematically renew natural resources and to minimize waste and pollution” (p.130). The study also responds to Pfeffer's [76] call for building sustainable organizations, not only from an environmental perspective, but also from a human point of view.

References

1. Luthans, F., Youssef, C.M. & Avolio, B.J. (2007). *Psychological capital: Developing the human competitive edge*. Oxford: Oxford University Press.
2. Dawkins, S., Martin, A., Scott, J. & Sanderson, K. (2013). Building on the positives: A psychometric review and critical analysis of the construct of Psychological Capital. *Journal of Occupational and Organizational Psychology*, 86, 348–370.
3. Newman, A., Ucbasaran, D., Zhu, F. & Hirst, G. (2014). Psychological capital: A review and synthesis. *Journal of Organizational Behavior*, 35, S120-S138.
4. Avey, J.B., Reichard, R.J., Luthans, F. & Mhatre, K.H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127-152. doi: 10.1002/hrdq.20070
5. Aguinis, H. & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of Management*, 38(4), 932-968. doi: 10.1177/0149206311436079
6. Stites, J.P. & Michael, J.H. (2011). Organizational commitment in manufacturing employees: Relationships with corporate social performance. *Business & Society*, 50(1), 50-70.

7. Rupp, D.E. & Mallory, D.B. (2015). Corporate social responsibility: Psychological, person-centric, and progressing. *The Annual Review of Organizational Psychology and Organizational Behavior*, 2, 211-236. doi: 10.1146/annurev-orgpsych-032414-111505
8. Estrada, C., Isen, A. & Young, M. (1994). Positive affect improves creative problem solving and influences reported source of practice satisfaction in physicians. *Motivation and Emotion*, 18(4), 285-299. doi: 10.1007/bf02856470
9. Arnold, K.A., Turner, N., Barling, J., Kelloway, E.K. & McKee, M.C. (2007). Transformational leadership and psychological well-being: The mediating role of meaningful work. *Journal of Occupational Health Psychology*, 12(3), 193-203. doi: 10.1037/1076-8998.12.3.193
10. Robertson, I. & Cooper, C. (2011). *Well-being: Productivity and Happiness at Work*. New York, NY: Palgrave Macmillan.
11. Steger, M.F., Dik, B.J. & Duffy, R.D. (2012). Measuring meaningful work: The work and meaning inventory (WAMI). *Journal of Career Assessment*, 20(3), 322-337. doi: 10.1177/1069072711436160
12. Rosso, B.D., Dekas, K.H. & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30(0), 91-127. doi: 10.1016/j.riob.2010.09.001
13. Cameron, K.S. & Spreitzer, G.M. (2012). *The Oxford Handbook of Positive Organizational Scholarship*. New York, NY: Oxford University Press.
14. Avey, J.B., Avolio, B.J. & Luthans, F. (2011). Experimentally analyzing the impact of leader positivity on follower positivity and performance. *The Leadership Quarterly*, 22, 282-294. doi: 10.1016/j.leaqua.2011.02.004
15. Luthans, F., Youssef-Morgan, C.M. & Avolio, B.J. (2015). *Psychological capital and beyond*. Oxford: Oxford University Press.
16. Luthans, F., Norman, S.M., Avolio, B.J. & Avey, J.B. (2008). The mediating role of psychological capital in the supportive organizational climate-employee performance relationship. *Journal of Organizational Behavior*, 29(2), 219-238.
17. Rego, A., Sousa, F., Marques, C. & Cunha, M.P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3), 429. doi: 10.1016/j.jbusres.2011.10.003
18. Bandura, A. (2008). An agentic perspective on positive psychology. In S.J. Lopez (Ed.), *Positive Psychology: Exploring the Best in People* (Vol. 1, pp. 167-196). Westport, CT: Greenwood Publishing.
19. Dawkins, S., Martin, A., Scott, J. & Sanderson, K. (2015). Advancing the conceptualization and measurement of Psychological Capital as a collective construct. *Human Relations*. doi: 10.1177/0018726714549645
20. Turker, D. (2009). How corporate social responsibility influences organizational commitment. *Journal of Business Ethics*, 89(2), 189-204. doi: 10.1007/s10551-008-9993-8
21. Maignan, I., Ferrell, O.C. & Hult, G.T.M. (1999). Corporate citizenship: Cultural antecedents and business benefits. *Journal of the Academy of Marketing Science*, 27(4), 455-469. doi: 10.1177/0092070399274005
22. Carroll, A.B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(3), 268-295.
23. Carroll, A.B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39-48.
24. Lin, C.-P. (2010). Modeling corporate citizenship, organizational trust, and work engagement based on attachment theory. *Journal of Business Ethics*, 94, 517-531. doi: 10.1007/s10551-009-0279-6
25. Lin, C.-P., Lyau, N.-M., Tsai, Y.-H., Chen, W.-Y. & Chiu, C.-K. (2010). Modeling corporate citizenship and its relationship with organizational citizenship behaviors. *Journal of Business Ethics*, 95, 357-372. doi: 10.1007/s10551-010-0364-x
26. Maignan, I. (2001). Consumers' perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of Business Ethics*, 30(1), 57-72. doi: 10.1007/s10551-001-0364-x
27. Peterson, D.K. (2004). The relationship between perceptions of corporate citizenship and organizational commitment. *Business & Society*, 43(3), 296-319. doi: 10.1177/0007650304268065
28. Rego, A., Leal, S. & Cunha, M.P. (2011). Rethinking the employees' perceptions of corporate citizenship dimensionalization. *Journal of Business Ethics*, 104(2), 207-218. doi: 10.1007/s10551-011-0899-5
29. Rego, A., Leal, S., Cunha, M.P., Faria, J. & Pinho, C. (2010). How the perceptions of five dimensions of corporate citizenship and their inter-inconsistencies predict affective commitment. *Journal of Business Ethics*, 94(1), 107-127. doi: 10.1007/s10551-009-0252-4
30. Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E.A. Locke (Ed.), *The Blackwell handbook of principles of organizational behavior* (pp. 120-136). Oxford: Blackwell.

31. Luthans, F. & Youssef, C.M. (2004). Human, social and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33(2), 143-160. doi: 10.1016/j.orgdyn.2004.01.003
32. Parker, S. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 6, 835-852.
33. Luthans, F., Avey, J.B., Avolio, B.J., Norman, S.M. & Combs, G.M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior*, 27(3), 387-393.
34. Caza, B.B. & Milton, L.P. (2012). Resilience at work: Building capability in the face of adversity. In K.S. Cameron and G. Spreitzer (Ed.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 895-908). Oxford: Oxford University Press. (Reprinted from).
35. Bunderson, J.S. & Thompson, J.A. (2009). The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work. *Administrative Science Quarterly*, 54(1), 32-57. doi: 10.2189/asqu.2009.54.1.32
36. Kanter, R.M. (2011). How great companies think differently. *Harvard Business Review*, 89(11), 66-78.
37. Fairlie, P. (2011). Meaningful work, employee engagement, and other key employee outcomes: Implications for human resource development. *Advances in Developing Human Resources*, 13(4), 508-525. doi: 10.1177/1523422311431679
38. Luthans, F. & Peterson, S.J. (2002). Employee engagement and manager self-efficacy. *Journal of Management Development*, 21(5/6), 376. doi: 10.1108/02621710210426864
39. Pertulla, K.H. & Cardon, M.S. (2012). Passion. In K.S. Cameron and G. Spreitzer (Ed.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 190-199). Oxford: Oxford University Press.
40. Wrzesniewski, A. (2012). Callings in work. In K.S. Cameron and G. Spreitzer (Ed.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 45-55). Oxford: Oxford University Press.
41. Cameron, K.S., Bright, D. & Caza, A. (2004). Exploring the relationships between organizational virtuousness and performance. *American Behavioral Scientist*, 47(6), 766-790. doi: 10.1177/0002764203260209
42. Cameron, K.S., Mora, C., Leutscher, T. & Calarco, M. (2011). Effects of positive practices on organizational effectiveness. *Journal of Applied Behavioral Science*, 47(3), 266-308. doi: 10.1177/0021886310395514
43. Ryan, R.M. & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037/10003-066X.55.1.68
44. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350-383.
45. Spector, P.E. & Fox, S. (2002). An emotion-centred model of voluntary work behavior: Some parallels between counterproductive behavior and organizational citizenship behavior. *Human Resource Management Review*, 12(269-292).
46. Fredrickson, B.L. (2009). *Positivity*. New York, NY: Crown.
47. Forgas, J.P. (1992). Affect in social judgments and decisions: A multiprocess approach. In M. Zanna (Ed.), *Advances in Experimental Social Psychology* (pp. 227-276). New York: Academic Press.
48. Wright, T.A. & Walton, A.P. (2003). Affect, psychological well-being and creativity: Results of a field study. *Journal of Business and Management*, 9(1), 21-32.
49. Tugade, M.M. & Fredrickson, B.L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333.
50. Podsakoff, P.M., MacKenzie, S.B. & Podsakoff, N.P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539-569.
51. Fry, L.W., Vitucci, S. & Cedillo, M. (2005). Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline. *The Leadership Quarterly*, 16(5), 835-862. doi: 10.1016/j.leaqua.2005.07.012
52. Turban, D.B., Stevens, C.K. & Lee, F.K. (2009). Effects of conscientiousness and extraversion on new labor market entrants' job search: The mediating role of metacognitive activities and positive emotions. *Personnel Psychology*, 62(3), 553-573. doi: 10.1111/j.1744-6570.2009.01148.x
53. Burke, M.J., Brief, A.P., George, J.M., L., R. & Webster, J. (1989). Measuring affect at work: Confirmatory analyses of competing mood structures with conceptual linkage to cortical regulatory systems. *Journal of Personality and Social Psychology*, 57, 1091-1102. doi:
54. Luthans, F., Avolio, B.J., Avey, J.B. & Norman, S.M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541-572. doi: 10.1111/j.1744-6570.2007.00083.x

55. Peterson, S.J., Luthans, F., Avolio, B.J., Walumbwa, F.O. & Zhang, Z. (2011). Psychological capital and employee performance: A latent growth modeling approach. *Personnel Psychology*, 64, 427-450.
56. Avey, J.B., Wernsing, T.S. & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *Journal of Applied Behavioral Science*, 44(1), 48-70. doi: 10.1177/0021886307311470
57. Camfield, L., Guillen-royo, M. & Velazco, J. (2010). Does needs satisfaction matter for psychological and subjective wellbeing in developing countries: A mixed-methods illustration from Bangladesh and Thailand. *Journal of Happiness Studies*, 11(4), 497-516.
58. Huppert, F.A. (2009). Psychological well-being: Evidence regarding causes and consequences. *Applied Psychology: Health and Well-Being*, 1(2), 137-164.
59. Avey, J.B., Nimnicht, J.L. & Pigeon, N.G. (2010). Two field studies examining the association between positive psychological capital and employee performance. *Leadership & Organization Development Journal*, 31(5), 384-401. doi: 10.1108/01437731011056425
60. Rego, A., Marques, C., Leal, S., Sousa, F. & Cunha, M.P. (2010). Psychological capital and performance of civil servants: Exploring neutralizers in the context of an appraisal system. *The International Journal of Human Resource Management*, 21(9), 1531-1552. doi: 10.1080/09585192.2010.488459
61. Cheung, G.W. & Lau, R.S. (2008). Testing mediation and suppression effects of latent variables bootstrapping with structural equation models. *Organizational Research Methods*, 11(1), 296-325. doi: 10.1177/1094428107300343
62. MacKinnon, D.P., Lockwood, C.M., Hoffman, J.M., West, S.G. & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104. doi: 10.1037//1082-989X.7.1.83
63. MacKinnon, D.P., Lockwood, C.M. & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research*, 39(99-128).
64. Jones, D.A. (2010). Does serving the community also serve the company? Using organizational identification and social exchange theories to understand employee responses to a volunteerism programme. *Journal of Occupational and Organizational Psychology*, 83, 857-878. doi: 10.1348/096317909X477495
65. Herrbach, O., Mignonac, K. & Gatignon, A.-L. (2004). Exploring the role of perceived external prestige in managers' turnover intentions. *International Journal of Human Resource Management*, 15(8), 1390-1407. doi: 10.1080/0958519042000257995
66. Grant, A.M., K., C.M. & H., P.R. (2007). Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs. *Academy of Management Perspectives*, 21, 51-63.
67. Youssef, C. & Luthans, F. (2012). Psychological capital: Meaning, findings and future directions. In K.S. Cameron and G. Spreitzer (Ed.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 17-27). Oxford: Oxford University Press.
68. Wright, T.A. & Cropanzano, R. (2004). The role of psychological well-being in job performance: A fresh look at an age-old quest. *Organizational Dynamics*, 33(4), 338-351. doi: 10.1016/j.orgdyn.2004.09.002
69. Kahneman, D. (2011). *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux.
70. Hofstede, G. (1997). *Cultures and organizations: Software of the mind*. Berkshire (UK): McGraw-Hill.
71. House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. & Gupta, V. (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Thousand Oaks (CA): SAGE Publications.
72. Cameron, K.S. & Winn, B. (2012). Virtuousness in organizations. In K.S. Cameron and G. Spreitzer (Ed.), *The Oxford Handbook of Positive Organizational Scholarship* (pp. 231-243). Oxford: Oxford University Press.
73. Rego, A., Ribeiro, N. & Cunha, M. (2010). Perceptions of organizational virtuousness and happiness as predictors of organizational citizenship behaviors. *Journal of Business Ethics*, 93(2), 215-235. doi: 10.1007/s10551-009-0197-7
74. Rego, A., Ribeiro, N., Cunha, M.P. & Jesuino, J.C. (2011). How happiness mediates the organizational virtuousness and affective commitment relationship. *Journal of Business Research*, 64, 524-532. doi: 10.1016/j.jbusres.2010.04.009
75. Shrivastava, P. (1995). Ecocentric management for a risk society. *Academy of Management Review*, 20(1), 118-137. doi: 10.5465/amr.1995.9503271996
76. Pfeffer, J. (2010). Building sustainable organizations: The human factor. *Academy of Management Perspectives*, February, 34-45.

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